

Claims:

1. A pressure sensor comprising:

a sensor unit in which a piezoelectric layer containing a piezoelectric ceramic material is sandwiched by a plurality of
5 electrodes;

a covering layer which covers the sensor unit; and
heat insulating means made from an expandable synthetic
resin which covers the circumference of the covering layer.

10 2. A pressure sensor as set forth in Claim 1, wherein
the sensor unit is a cable-like sensor comprising a primary
electrode which makes up a core unit, a piezoelectric layer which
covers the primary electrode and a secondary electrode which
covers the outside of the piezoelectric layer.

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3. A pressure sensor as set forth in Claim 1, wherein
the sensor unit is a sheet-like sensor which is formed such that
a piezoelectric layer is sandwiched by a primary electrode and
a secondary electrode.

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4. A pressure sensor as set forth in any of Claims 1 to
3, wherein the heat insulating means is an elastic material having
a hollow portion formed therein.

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5. A pressure sensor as set forth in any of Claims 1 to
4, wherein the heat insulating means is made to double as the
covering layer.

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6. A pressure sensor as set forth in any of Claims 1 to
5, wherein the heat insulating means comprises a mounting portion
for mounting the pressure sensor on an equipment base material.

7. A pressure sensor fabricating method for fabricating

the pressure sensor set forth in any of Claims 1 to 6, comprising a step of molding a heat insulating means on the periphery of the sensor unit through extrusion molding.

5 8. An object detecting system comprising the pressure sensor set forth in any of Claims 1 to 6 and determination means for determining on the contact of a foreign matter with the pressure sensor based on an output signal of the pressure sensor, whereby the contact of an object with the equipment is detected.

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9. An object detecting system comprising:
the pressure sensor set forth in any of Claims 1 to 6 that
is mounted either on an edge of an opening of equipment or on an
edge of a closing member which opens and closes the opening; and
15 determination means for determining on the contact of a
foreign matter with the pressure sensor based on an output signal
of the pressure sensor, whereby the trapping of a foreign matter
between the opening and the closing member is detected.

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